

ABSTRACT

An energy monitoring and management system and method are provided herein. The system and method centralize load metering by utilizing at least one sensor for observing load characteristics (*e.g.*, Volts, Amperes, Watts, active energy...) communicatively coupled  
5 *via* a backplane to a waveform analyzer component of a control component. The waveform analyzer component generates metered data values after receiving input from the at least one sensor. Subsequently and if so desired, the control component can send a control signal to the load to alter the state of the load or simply reduce the power to a load. Such input, output, and processing functionality, according to an aspect of the present invention, are  
10 employed using a backplane to facilitate high-speed communication among components and to allow metered data to be centrally stored, manipulated, analyzed or communicated to other components or sub-components.